

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

----- In the Matter of -----)	
)	
PUBLIC UTILITIES COMMISSION)	DOCKET NO. 2021-0024
)	
Opening a Proceeding to Review)	
Hawaiian Electric's Interconnection)	
Process and Transition Plans for)	
Retirement of Fossil Fuel Power)	
Plants.)	
_____)	

ORDER NO. 37624

OPENING THE DOCKET

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OPENING THE DOCKET

By this Order, the Public Utilities Commission ("Commission") opens this docket to review the status and interconnection progress of various HAWAIIAN ELECTRIC COMPANY, INC., HAWAII ELECTRIC LIGHT COMPANY, INC. and MAUI ELECTRIC COMPANY, LIMITED's (collectively, "Hawaiian Electric," "the Companies," or "HECO Companies") renewable projects and the AES Hawaii Plant ("AES Plant") and Kahului Power Plant ("Kahului Plant") Transition Plans, and other fossil fuel power plant transition plans, as needed.

I.

BACKGROUND

In October and December 2020, the Commission held status conferences ("Status Conferences") to review the impact of interconnection delays on renewable energy projects and to gather additional information from Hawaiian Electric regarding its plans in anticipation of the retirement of the AES Plant on Oahu in December 2022.¹

In these Status Conferences, the Commission asked for updates on a range of topics, including the current status of Community-Based Renewable Energy ("CBRE")² and utility-scale renewable energy projects from recent solicitations;³ impacts to

¹See Docket No. 2017-0352, Letters From: Commission Re: Status Conferences, filed on October 22, 2020, and December 15, 2020, respectively. The AES Plant is a 180 MW coal-burning power plant located at Campbell Industrial Park on Oahu.

²See Docket No. 2015-0389, In re Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited, Application for Approval to Establish a Rule to Implement a Community-Based Renewable Energy Program, and Other Related Matters, opened on October 1, 2015.

³See Docket No. 2017-0352, In re Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited, To Institute a Proceeding Relating to a Competitive Bidding Process to Acquire Dispatchable and Renewable Generation ("Stage 1 procurement"), and Docket Nos. 2018-0430, -0431, -0432, -0433, -0434, -0435, and -0436 ("Stage 1 projects"). Hawaiian Electric also conducted a Stage 2 solicitation, and the power purchase agreements ("PPAs") for projects resulting from that solicitation are currently under review by the Commission in Docket Nos. 2020-0136 through -0142, and 2020-0189 ("Stage 2 projects").

project costs and schedules from interconnection requirements studies; reliability impacts from delays in replacement projects for the AES Plant; and plans to mitigate project delays.

The Status Conferences indicated that current interconnection processes are causing unnecessary delays and increasing project costs, and these problems are pervasive across CBRE and Stage 1 projects under development. The opacity of Hawaiian Electric's current interconnection processes also contributes to the challenges encountered by project developers and this Commission - while the Companies responded to several sets of Commission information requests regarding the status of these projects in 2020, acknowledging that the Interconnection Requirements Studies for Stage 1 projects were delayed, the Companies did not disclose how delays in completing the interconnection studies would impact the commercial operations dates of the projects. There was no discussion of delayed project commercial operations dates until subsequent Hawaiian Electric filings submitting the completed Interconnection Studies and power purchase agreement ("PPA") amendments, and even then that information was buried on page 10, in a reference to Attachment K of the filings.

This lack of transparency in the Companies' conduct surrounding the interconnection process has resulted in the potential for a significant setback to renewable energy

development in this State. Furthermore, the delays in these projects could seriously jeopardize cost-effective retirement of the AES Plant and impact reliability of the Oahu grid.

II.

INITIATING THE PROCEEDING

The Commission opens this proceeding to address the gaps that were exposed by these events. The Commission's primary objective with this docket is to transparently review and track the status of current projects,⁴ identify near-term interconnection process improvements to facilitate renewable projects under development, and elicit the best solutions to ensure a cost-effective retirement of the AES Plant, Kahului Plant, and other fossil fuel power plants, as needed, that maintains system reliability.

This docket will have three focus areas, as discussed further below:

1. Review and tracking of projects in the CBRE program and recent competitive procurements - Hawaiian Electric will report monthly on the status of all projects until they achieve successful commercial operations;

⁴The Commission intends to track projects under review in individual dockets and already approved in prior decisions, including projects in the CBRE program, resulting from the Stage 1 and 2 solicitations from Docket No. 2017-0352, and any additional utility-scale renewable projects requiring interconnection review.

2. Near-term improvements to Hawaiian Electric's interconnection process for projects in the CBRE program and recent competitive procurements - Hawaiian Electric will identify and implement near-term process improvements to facilitate the interconnection of projects in these programs; and

3. Review and tracking of Hawaiian Electric's transition plans to retire the AES Plant on Oahu, the Kahului Plant on Maui, and other fossil fuel power plants, as needed - the Commission will continue review of Hawaiian Electric's current plans and identify improvements to ensure the electrical system remains reliable and the plan is robust to external factors that could delay projects. The Commission has requested assistance from the Hawaii Natural Energy Institute ("HNEI") for independent review and analysis of these plans.

A.

Relationship to Other Dockets and Decision-Making

The instant repository docket will overarch several individual dockets involving the CBRE program and requests related to the Stage 1 and 2 RFPs. By this docket, the Commission is initiating a comprehensive review to ensure transparent tracking of the related projects and their inter-related effects on system reliability and cost in retiring the largest power generating unit on Oahu, as well as grid operations on each island. The Commission still intends to continue review and decision-making on the individual requests in their respective dockets. In this docket, the Commission will organize periodic status conferences and solicit feedback from interested stakeholders.

This docket is for planning and information-gathering purposes only, so the Commission does not intend to solicit intervenors or participants in the docket, but instead will allow any interested stakeholder to file comments and participate in future status conferences regarding Hawaiian Electric's plans. Any substantive decision-making that results from the information gathered in this docket will take place in the relevant individual dockets for the various CBRE, and Stage 1 and 2 projects or programs, as well as be applied to the examination of future interconnection processes resulting from any upcoming competitive procurements, as appropriate.

Regarding Hawaiian Electric's current plans for its system leading up to and following the retirement of the AES Plant, the Commission notes three recent filings the Companies have made with the Commission that the Commission seeks Hawaiian Electric's assistance in reconciling:

1. Docket No. 2020-0136, Hawaiian Electric Company, Inc.'s "Application for Approval of Energy Storage Power Purchase Agreement for Energy Storage Services with Kapolei Energy Storage I, LLC," stating that:

The [Kapolei Energy Storage] Project will provide the Company with flexible, dispatchable energy and will contribute to the capacity needed in order to enable the retirement of the AES Hawaii coal plant by September 2022 as scheduled, and allow the integration of more renewable resources on O'ahu.

. . .

In addition to replacing the majority of the capacity lost through the AES Hawaii coal plant, the Project is advantageous due to the ability for the Company to dispatch the Facility's available energy and capacity in real time, allowing the Facility to provide Fast Frequency Response to limit the frequency drop resulting from a frequency disturbance . . . and potentially contribute to many of the grid services as proposed in the Integrated Grid Planning process traditionally provided by conventional synchronous generation⁵

2. Hawaiian Electric Company, Inc.'s "Adequacy of Supply" Report, dated January 29, 2021, stating that:

The results of the Energy Reserve Margin criteria analysis . . . indicate that the energy reserve margin target is satisfied from 2021 through 2025 with the addition of Hawaiian Electric's planned generation and storage project additions. Sufficient energy supply is anticipated even with a 60 MW increase to peak loads.⁶

For purposes of the Adequacy of Supply report, Hawaiian Electric's "planned generation and storage project additions" refer to Ho'ohana Solar 1 (Docket No. 2018-0431), Mililani 1 Solar, LLC (Docket No. 2018-0434), Waiawa Solar Power LLC (Docket No. 2018-0435), AES West Oahu (Docket No. 2019-0050), Kapolei

⁵Docket No. 2020-0136, In re Hawaiian Electric Company, Inc., "Hawaiian Electric Company, Inc.'s Application; Exhibits 1-9; Verification; and Certificate of Service," filed on September 15, 2020, at 2, 9 (internal citations omitted).

⁶Hawaiian Electric Company, Inc., "Adequacy of Supply" Report, filed on January 29, 2021 ("2021 Adequacy of Supply Report"), at 13, available at: <https://puc.hawaii.gov/reports/energy-reports/adequacy-of-supply/>.

Energy Storage (Docket No. 2020-0136), Kupehau Solar (Docket No. 2020-0138), Mountain View Solar (Docket No. 2020-0139), Waiawa Phase 2 Solar (Docket No. 2020-0137), Barbers Point Solar (Docket No. 2020-0143), and Mahi Solar (Docket No. 2020-0140).⁷ However, the Energy Reserve Margin criteria analysis also shows sufficient energy supply with these future generation and storage projects, minus the Kapolei Energy Storage project (Docket No. 2020-0136).⁸

3. Docket No. 2017-0352, Hawaiian Electric "Notice of Proceeding with O'ahu 60 MW Grid Services Request for Proposal," stating that:

the Company's Energy Reserve Margin capacity planning criteria indicates there is a risk of capacity reserve shortfall upon expiration of the [AES] PPA, if, among other things, commercial operation of the RFP Stage 1 solar plus storage projects and the RFP [S]tage 2 [] Kapolei Energy Storage are delayed . . . the Company has been identifying and considering contingency options to mitigate the delay risks. This proposed 60 MW RFP is one such mitigation measure consistent with multiple state energy policy objectives.^[9]

⁷2021 Adequacy of Supply Report at 11 (Section 3.6.2).

⁸2021 Adequacy of Supply Report at 13 (Section 4.2.1).

⁹Docket No. 2017-0352, Hawaiian Electric "Notice of Proceeding with O'ahu 60 MW Grid Services Request for Proposal," filed on February 5, 2021 ("Oahu Grid Services RFP Notice Letter") (emphasis added).

Regarding Hawaiian Electric's current plans for its system leading up to and following the retirement of the Kahului Plant, the Commission notes the following filings that the Companies have made with the Commission:

1. Docket No. 2020-0167, "Maui Electric Application for Approval to Commit Funds in Excess of \$2,500,000 (Excluding Customer Contributions) for the Switchyard/Synchronous Condenser Project and to Recover Costs through the Major Project Interim Recovery Adjustment Mechanism, stating that:

The approvals sought by this Application are part of a plan that will enable Maui Electric to retire its oil-firing generating units at the Kahului Power Plant and facilitate integration of more renewable energy, while maintaining reliable service to the island. Based on extensive review and analysis of different options, the Company determined this Switchyard/Synchronous Condenser Project is the best-fit and most cost-effective solution to do so.

. . . .

[R]etiring the generating units at KPP from service requires two major items: 1) replacement capacity to replace the power and generation produced by KPP; and 2) a solution to the transmission issues that arise through the loss of voltage support, inertia, short circuit current, and capacity on the 23 kV system, where the KPP generating units are located. The generation and capacity issues are being addressed by separate related applications for renewable energy generation and storage acquired through the Stage 2 [RFPs] for the

Island of Maui . . . This Project will address the transmission issues.^[10]

2. Docket No. 2020-0132, "Application of Maui Electric Company, Ltd. For Approval to Commit Funds in Excess of \$2,500,000 for the Purchase and Installation of Item MX.005002, Waena Battery Energy Storage System Project, and to Recover Costs through the Major Project Interim Recovery Adjustment Mechanism," stating that:

The proposed Waena BESS Project which is a 40MW/160MWh battery system targeted for service in 2023, will serve as a capacity resource on the Maui grid, which will enable the retirement of the Kahului Power Plant. In addition to its capacity role, and as required by the Stage 2 REP, it will have the capability to serve as an energy-shifting resource, as well as providing grid-following, grid-forming and blackstart capabilities.^[11]

3. The above-referenced Oahu Grid Services RFP Notice Letter, stating that the 60 MW RFP that is the subject of the Letter "will target procurement of grid services to the island of O'ahu only[,] " but also noting that the "Company recognizes a reserve margin shortfall [] identified for Maui for [the] years of

¹⁰Docket No. 2020-0167, "Maui Electric Application; Verification; Exhibits 1-16; and Certificate of Service," filed on October 22, 2020, at 3-4.

¹¹Docket No. 2020-0132, "Application of Maui Electric Company, Ltd.; Verification; Exhibits 1-9; and Certificate of Service," filed on September 8, 2020.

2021 and 2022 in the Adequacy of Supply Report filed on January 29, 2021[,]" for which it is "assessing options."¹²

B.

Review of Performance Incentives for Phase 1 Renewable Projects

In Order No. 35405, the Commission adopted a performance incentive mechanism ("PIM") for Stage 1 of the HECO Companies' procurement effort.¹³ The Commission adopted a mechanism that involved two allocation periods with the intent to establish, "a simple, yet meaningful, incentive to successfully execute the procurement process and bring additional value to customers."¹⁴ The first allocation period was based on Hawaiian Electric submitting the Stage 1 PPAs to the Commission for review by December 31, 2018, which has already occurred. The second allocation period, "will be made following the first year of commercial operations for each project."¹⁵ Given the significant delays to these Stage 1 projects that threaten to diminish the

¹²Oahu Grid Services RFP Notice Letter at 2 and n.3.

¹³In re Hawaiian Elec. Co., Inc., Docket No. 2017-0352, Order No. 35405, "Establishing a Performance Incentive Mechanism for Procurement in Phase 1 of the Hawaiian Electric Companies' Final Variable Requests for Proposals," filed on April 6, 2018 ("Order No. 35405").

¹⁴See Order No. 35405 at 14.

¹⁵Order No. 35405 at 14.

near-term value to customers, the Commission finds it necessary to review the second allocation of the PIMs. The Commission will provide further guidance on the PIM review following submission of Hawaiian Electric's status updates described below.

C.

Next Procedural Steps

By March 5, 2021, Hawaiian Electric will file an initial status update that will address the three broad topic areas outlined above, and the Commission will continue review and solicit stakeholder feedback.

Hawaiian Electric's initial status update shall include:

Focus Area 1 - Current status of Project Timelines.

The Commission seeks the current status and timelines for all projects in the CBRE program and those Commission-approved projects resulting from recent competitive procurements, complete list of all permit/government approvals remaining and the status of such approvals needed to achieve commercial operations for each project, and all steps Hawaiian Electric is taking to expedite the successful completion of these projects.

Focus Area 2 - Detailed discussion of action steps

Hawaiian Electric is taking to address interconnection delays with current projects under development. The Commission has also requested that stakeholders in the CBRE docket identify process

improvements for the Stage 2 tariffs and RFPs.¹⁶ The filings in this docket should incorporate the discussions with stakeholders and developers in the CBRE program.

Focus Area 3 - Continue Review of Hawaiian Electric's Fossil Fuel Power Plant Transition Plans. Hawaiian Electric shall identify all projects and initiatives that are underway and/or planned to facilitate a cost-effective, reliable, and on-time retirement of the AES Plant at the end of the current PPA ("AES Plant Transition Plan"). This AES Plant Transition Plan shall include contingencies to address potential delays and cancellation of individual projects and programs, as well as reconcile the inconsistencies in its existing filings with the Commission discussed above in Section II.A. Hawaiian Electric should include quantitative assessments of the total costs of the Transition Plan and impacts on system reliability.

Following the filing of Hawaiian Electric's initial status update, the Commission will allow 20 days for interested stakeholder comments and will schedule a status conference for further discussion. Stakeholder comments can include alternative proposals the Commission can consider in reviewing

¹⁶See In re Hawaiian Elec. Co., Inc., Docket No. 2015-0389, Order No. 37592, "(1) Developing Recommendations; (2) Addressing Phase 1 Contracts; and (3) Granting the Motion to Withdraw of Renewable Energy Action Coalition of Hawaii, Inc.," filed on January 29, 2021.

Hawaiian Electric's AES Plant Transition Plan. The Commission will also be working with the Hawaii Natural Energy Institute ("HNEI") for further technical review and assessment of Hawaiian Electric's AES Plant Transition Plan.

Related to Focus Area 3, above, the Commission notes that Hawaiian Electric plans to retire its Kahului Plant, in Kahului, Maui, in 2023. In an effort to address the plans for retirement of that facility well in advance of its retirement, the Commission similarly requests, that by April 2, 2021, Hawaiian Electric shall file in this docket the entirety of its current plans for the Kahului Plant transition ("Kahului Plant Transition Plan"), including how Hawaiian Electric anticipates incorporating the resources discussed above in Section II.A into that Plan. Stakeholder comments will be due within 20 days of the filing of the Kahului Plant Transition Plan, and the Commission will address that Plan by subsequent status conference, scheduled in this docket.

III.

ORDERS

THE COMMISSION ORDERS:

1. This repository docket is opened for the purposes of reviewing the progress of various Hawaiian Electric-related renewable projects, as set forth above, and Hawaiian Electric's

AES Plant and Kahului Plant Transition Plans, and other fossil fuel power plant transition plans, as needed.

2. Hawaiian Electric's initial status update, described above, shall be filed in this docket by March 5, 2021. Stakeholder comments addressing that status update are due within 20 days of the filing of the status update, and the Commission will schedule a status conference for further discussion.

3. Additionally, by April 2, 2021, Hawaiian Electric shall file in this docket its current Kahului Plant Transition Plan. Stakeholder comments will be due within 20 days of the filing of the Kahului Plant Transition Plan, and the Commission will address that Plan by subsequent status conference.

DONE at Honolulu, Hawaii FEBRUARY 11, 2021.

PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

By James P. Griffin
James P. Griffin, Chair

By Jennifer M. Potter
Jennifer M. Potter, Commissioner

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CERTIFICATE OF SERVICE

Pursuant to Order No. 37043, the foregoing order was served on the date of filing by electronic mail addressed to the following parties:

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